ABSTRACT OF THE DISCLOSURE

A memory device includes memory cells each having a capacitor including a lower electrode, a ferroelectric film and an upper electrode which are formed in this order over a substrate made of silicon. The ferroelectric film is selectively grown on the lower electrode. Such selective formation of the ferroelectric film on the lower electrode having a desired shape prevents a damaged portion from occurring in the ferroelectric film, thus making it possible to downsize the memory cells.